

## SPECIAL SECTION

## Dealing with Data

## INTRODUCTION

- 692 Challenges and Opportunities

## NEWS

- 694 Rescue of Old Data Offers Lesson  
for Particle Physicists
- 696 Is There an Astronomer in the House?
- 698 May the Best Analyst Win

## PERSPECTIVES

- 700 Climate Data Changes in the 21st Century  
J. T. Overpeck et al.  
>> Science Podcast
- 703 Challenges and Opportunities of  
Open Data in Ecology  
O. J. Reichman et al.
- 705 Changing the Equation on Scientific  
Data Visualization  
P. Fox and J. Hendler
- 708 Challenges and Opportunities in  
Mining Neuroscience Data  
H. Akil et al.

- 712 **The Disappearing Third Dimension**  
*T. Rowe and L. R. Frank*
- 714 **Advancing Global Health Research Through Digital Technology and Sharing Data**  
*T. Lang*
- 717 **More Is Less: Signal Processing and the Data Deluge**  
*R. G. Baraniuk*
- 719 **Ensuring the Data-Rich Future of the Social Sciences**  
*G. King*
- 721 **Metaknowledge**  
*J. A. Evans and J. G. Foster*
- 725 **Access to Stem Cells and Data: Persons, Property Rights, and Scientific Progress**  
*D. J. H. Mathews et al.*
- 728 **On the Future of Genomic Data**  
*S. D. Kahn*

>> Editorial p. 649, News Focus section p. 662,  
Books p. 676, Policy Forum p. 678; Science Express,  
Science Signaling, Science Translational Medicine,  
and Science Careers content plus online discussion and  
Podcast p. 645 and [www.sciencemag.org/special/data/](http://www.sciencemag.org/special/data/)

## EDITORIAL

- 649 Making Data Maximally Available  
Brooks Hanson, Andrew Sugden, Bruce Alberts  
>> Dealing with Data section p. 692

## NEWS OF THE WEEK

- 654 A roundup of the week's top stories

## NEWS & ANALYSIS

- 658 Pfizer's Shakeup Means  
Less Money for Research
- 659 From Nuclear Watchdog  
to the Maelstrom of Cairo

- 660 The Genome Project:  
What Will It Do as a Teenager?  
>> *Genome Anniversary Essays p. 689*
- 661 Ending Earmarks Also Means the End  
of Many Research Projects

## NEWS FOCUS

- 662 **HUMAN GENOME 10TH ANNIVERSARY**  
**What Would You Do?**  
    *>> Science Podcast*
- 666 **Will Computers Crash Genomics?**  
    *>> Genome Anniversary Essays p. 689;*  
    *Dealing with Data section p. 692*
- 669 **Coming Soon to a Lab Near You:**  
**Drag-and-Drop Virtual Worlds**  
    *>> Dealing with Data section p. 692*

## LETTERS

- 673 **Undercutting the Grant Process**  
*A. M. Gade*
- Assessing Performance Through Understanding**  
*P. Cintas*
- Leading the Charge to Virtual Meetings**  
*W. W. Dolci et al.*
- No Mystery About the Polio Outbreak**  
*C. L. Crawford*
- 674 **CORRECTIONS AND CLARIFICATIONS**

## BOOKS ET AL.

- 675 **Disaster Deferred**  
S. Stein, reviewed by M. Hamburger
- 676 **Atlas of Science**  
K. Börner, reviewed by M. A. Porter  
>>> *Dealing with Data* section p. 692

## POLICY FORUM

- 678 Measuring the Results of  
Science Investments  
J. Lane and S. Bertuzzi  
>> Dealing with Data section p. 692

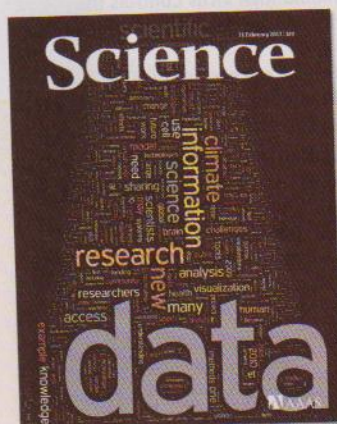
## PERSPECTIVES

- 681 **The Eukaryotic Ribosome**  
V. Ramakrishnan  
>>> *Research Article p. 730*
- 682 **Learning from Nature**  
J. O. Kephart
- 683 **The Lives of Proteins**  
J. B. Plotkin  
>>> *Report p. 764*
- 685 **The Genetics of Primary Aldosteronism**  
J. W. Funder  
>>> *Report p. 768*
- 686 **Astronomy in the Time Domain**  
E. Bernardini  
>>> *Reports pp. 736 and 739*
- 687 **Unusual Thermoelastic Properties  
of Methanaol Monohydrate**  
J. N. Grima et al.  
>>> *Report p. 742*

**CONTENTS** continued >>

## DEPARTMENTS

- 647 This Week in Science
- 650 Editors' Choice
- 652 Science Staff
- 783 New Products
- 784 Information for Authors
- 786 Science Careers



## COVER

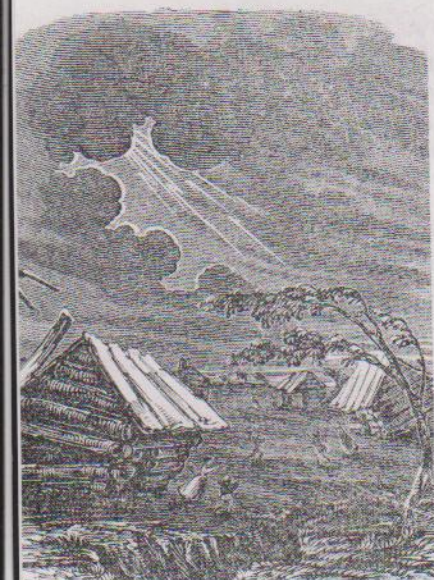
A word cloud generated from all of the content from the Dealing with Data special section beginning on p. 692. The size of each word relates to the frequency with which it appears in the combined texts. References and figure legends were included; common words, authors, and affiliations were excluded. All words are lowercase. See an expanded version of this cloud and other features at [www.sciencemag.org/special/data/](http://www.sciencemag.org/special/data/).

Credit: Yael Fitzpatrick, using [www.wordle.net](http://www.wordle.net)





page 666



page 675



page 753

## ESSAYS

- 689 **Genome-Sequencing Anniversary: A Celebration of the Genome, Part II**  
**My Genome**  
*D. Tutu*  
**Genome Literacy**  
*E. T. Dermitzakis*  
**Personal Genomics: For One and for All**  
*J. Wang*  
**The Landscape of Human Evolution**  
*P. Sabeti*  
**My Genome, My Identity, My Health**  
*C. D. M. Royal*  
**What Will Drive Genomics Over the Next 10 Years?**  
*A. Caplan*  
**An Anniversary Party**  
*K. Stefánsson*  
**First Steps on a Long Road**  
*E. Schadt*  
 >> News stories pp. 660, 662, and 666

## RESEARCH ARTICLE

- 730 **Crystal Structure of the Eukaryotic 40S Ribosomal Subunit in Complex with Initiation Factor 1**  
*J. Rabl et al.*  
 The structure provides insight into how protein synthesis is initiated and into the evolution of the eukaryotic ribosome.  
 >> Perspective p. 681

## REPORTS

- 736 **Discovery of Powerful Gamma-Ray Flares from the Crab Nebula**  
*M. Tavani et al.*  
 739 **Gamma-Ray Flares from the Crab Nebula**  
*A. A. Abdo et al.*  
 Gamma-ray observations of the Crab Nebula by two different space telescopes challenge particle acceleration theory.  
 >> Perspective p. 686  
 742 **Negative Linear Compressibility and Massive Anisotropic Thermal Expansion in Methanol Monohydrate**  
*A. D. Fortes et al.*  
 At low temperatures, a simple molecular crystal can shrink along one axis when heated and expand along it when compressed.  
 >> Perspective p. 687

- 746 **Increasing Solar Absorption for Photocatalysis with Black Hydrogenated Titanium Dioxide Nanocrystals**  
*X. Chen et al.*  
 An amorphous surface layer on titanium dioxide nanoparticles creates electronic states that allow longer-wavelength photoexcitation.  
 750 **Complete Fourth Metatarsal and Arches in the Foot of *Australopithecus afarensis***  
*C. V. Ward et al.*  
 A long bone of the foot of an early human indicates that its foot was stiff and arched, as in modern humans.  
 753 **Embryological Evidence Identifies Wing Digits in Birds as Digits 1, 2, and 3**  
*K. Tamura et al.*  
 Digit identities in living birds are the same as in three-fingered dinosaurs, in agreement with paleontological evidence.  
 757 **Structure of MyTH4-FERM Domains in Myosin VIIa Tail Bound to Cargo**  
*L. Wu et al.*  
 Structural data suggest how mutations in a myosin tail cause deafness in humans.  
 760 **HSPC117 Is the Essential Subunit of a Human tRNA Splicing Ligase Complex**  
*J. Popow et al.*  
 The human enzyme that joins transfer RNA exons together is discovered.  
 764 **Proteome Half-Life Dynamics in Living Human Cells**  
*E. Eden et al.*  
 In times of stress, long-lived proteins increase their durability.  
 >> Perspective p. 683  
 768 **K<sup>+</sup> Channel Mutations in Adrenal Aldosterone-Producing Adenomas and Hereditary Hypertension**  
*M. Choi et al.*  
 Potassium channel mutations drive both cell growth and hormone production in an adrenal tumor that causes severe hypertension.  
 >> Perspective p. 685  
 772 **Retrieval Practice Produces More Learning than Elaborative Studying with Concept Mapping**  
*J. D. Karpicke and J. R. Blunt*  
 Two different ways of thinking through texts are compared for learning value.  
 775 **Leishmania RNA Virus Controls the Severity of Mucocutaneous Leishmaniasis**  
*A. Ives et al.*  
 An RNA virus of a parasite binds to human Toll-like receptor 3 and modulates host immune responses to the parasite.  
 778 **Posttranslational Modification of Pili upon Cell Contact Triggers *N. meningitidis* Dissemination**  
*J. Chamot-Rooke et al.*  
 Regulated deaggregation allows meningitis-causing bacteria to propagate to new host cells and migrate across epithelia.



## SCIENCEONLINE



## SCIENCE TALK

Join an online discussion about data use and access and take our reader poll, both part of this week's Dealing with Data special section at [www.sciencemag.org/special/data/](http://www.sciencemag.org/special/data/)

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**The World's Technological Capacity to Store, Communicate, and Compute Information**

M. Hilbert and P. López

An inventory of the world's technological capacity from 1986 to 2007 reveals the evolution from analog to digital technologies.

10.1126/science.1200970

>> *Dealing with Data* section p. 692; *Science Podcast*

**Cortical Constriction During Abscission Involves Helices of ESCRT-III-Dependent Filaments**

J. Guizetti et al.

The process by which animal cells are physically separated after cell division is dissected in molecular detail.

10.1126/science.1201847

**Different B Cell Populations Mediate Early and Late Memory During an Endogenous Immune Response**

K. A. Pape et al.

A cell enrichment technique reveals the dynamics of the endogenous memory B cell response.

10.1126/science.1201730

**Tomography of Reaction-Diffusion**

**Microemulsions Reveals Three-Dimensional Turing Patterns**

T. Bánsági Jr. et al.

Tomography reveals three-dimensional Turing patterns created by the Belousov-Zhabotinsky reaction running in a microemulsion.

10.1126/science.1200815

**Dynamic Control of Chiral Space in a Catalytic Asymmetric Reaction Using a Molecular Motor**

J. Wang and B. L. Feringa

Photoisomerization of a molecular catalyst changes its conformation and switches the chirality of its reaction product.

10.1126/science.1199844

## SCIENCE NOW

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**New Zealand's Lost-and-Found Pink Terraces**  
Geologists rediscover a natural wonder drowned for over a century.

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<http://scim.ag/sand-trick>

## SCIENCE SIGNALING

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The Signal Transduction Knowledge Environment

**8 February issue:** <http://scim.ag/ss020811>

**RESEARCH ARTICLE: The Crystal Structure of a Self-Activating G Protein  $\alpha$  Subunit Reveals Its Distinct Mechanism of Signal Initiation**

J. C. Jones et al.

The *Arabidopsis* G protein  $\alpha$  subunit exhibits properties necessary and sufficient for receptor-independent activation.

**PERSPECTIVE: G $\alpha_q$  and Phospholipase C- $\beta$ —Turn On, Turn Off, and Do It Fast**

E. M. Ross

A crystal structure illuminates reciprocal regulation between a G protein and its effector.

**PERSPECTIVE: How Cells Use Pseudopods for Persistent Movement and Navigation**

P. J. M. Van Haastert

A model of pseudopod formation, splitting, and persistence describe how cells migrate.

## GLOSSARY

Find out what MAX, FRK, and TIMP mean in the world of cell signaling.

## SCIENCE TRANSLATIONAL MEDICINE

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Integrating Medicine and Science

**9 February issue:** <http://scim.ag/stm020911>

**COMMENTARY: Power to the People—Participant Ownership of Clinical Trial Data**

S. F. Terry and P. F. Terry

The time has come to crowd-source data for diagnostic and therapeutics development.

**COMMENTARY: Electronic Consent Channels—Preserving Patient Privacy Without Handcuffing Researchers**

R. H. Shelton

Policy-makers, researchers, and information technology leaders can help transform how we protect and use patient data.

>> *Dealing with Data* section p. 692 and [www.sciencemag.org/special/data/](http://www.sciencemag.org/special/data/)

**RESEARCH ARTICLE: Photodynamic Ablation of Lymphatic Vessels and Intralymphatic Cancer Cells Prevents Metastasis**

T. Tammela et al.

Photodynamic therapy suppresses metastasis by eradicating both the in-transit tumor cells and their conduit to distant tissues.

**RESEARCH ARTICLE: 5-Lipoxygenase Metabolite 4-HDHA Is a Mediator of the Antiangiogenic Effect of  $\omega$ -3 Polyunsaturated Fatty Acids**

P. Sapieha et al.

In mice, certain fatty acids in the diet are converted to a metabolite that blocks destructive vessel growth similar to diabetic retinopathy.

## SCIENCE CAREERS

[www.sciencereers.org/career\\_magazine](http://www.sciencereers.org/career_magazine)

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**More Than Words: Biomedical Ontologies Provide New Scientific Opportunities**

C. Wald

Biomedical ontology is growing as an informatics specialty, and ontologies are proving to be powerful software and data-mining tools.

**Surfing the Tsunami**

E. Pain

Scientists in many disciplines need informatics and computational skills to exploit the increasingly vast quantities of available data.

**Sharing Data in Biomedical and Clinical Research**

K. Travis

It's not always clear how or where to share raw data, particularly when it includes patient information.

>> *Dealing with Data* section p. 692 and [www.sciencemag.org/special/data/](http://www.sciencemag.org/special/data/)

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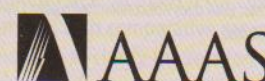
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## EDITORIAL

- 821 **Why Bother?**  
Alice S. Huang

## NEWS OF THE WEEK

- 829 A roundup of the week's top stories

## NEWS & ANALYSIS

- 832 **Obama's 2012 Vision Clashes With House Cuts in 2011**  
834 **High-Priced Recruiting of Talent Abroad Raises Hackles**  
835 **Science in Ivins Case Not Ironclad, NRC Says**  
836 **A Quake May Have Hinted That It Was on the Way**  
    >> *Research Article p. 877*  
837 **Growth Defect Blocks Cancer and Diabetes**

## NEWS FOCUS

- 838 **Can This DNA Sleuth Help Catch Criminals?**  
Emerging Forensics Field May Hit Legal, Ethical Obstacles  
    >> *Genome Anniversary Essays p. 872; Science Podcast*  
841 **NASA Weighs Asteroids: Cheaper Than Moon, But Still Not Easy**  
A Windfall for Defenders of the Planet  
844 **Europe's Eager Reformer Takes on Framework Funding Goliath**

## SPECIAL FEATURE

- 847 **2010 VISUALIZATION CHALLENGE**  
    >> *For related online content, go to [www.sciencemag.org/special/vis2010/](http://www.sciencemag.org/special/vis2010/); Science Podcast*

## LETTERS

- 857 **Amazon Science Needs Brazilian Leadership**  
A. C. M. Malhado  
**Boosting CITES Through Research**  
M. J. Smith et al.  
**Response**  
D. Bickford et al.

- Engage Students in Education Reform**  
M. Torchia  
**Response**  
R. Losick and D. O'Dowd

## 858 CORRECTIONS AND CLARIFICATIONS

## BOOKS ET AL.

- 859 **Conservation Science**  
P. Kareiva and M. Marvier,  
    *reviewed by J. Fanshawe*  
860 **Visceral**  
O. Catts and I. Zurr, *curators,*  
    *reviewed by D. Dixon et al.*

## POLICY FORUM

- 861 **Deflating the Genomic Bubble**  
J. P. Evans et al.  
    >> *Genome Anniversary Essays p. 872*

## PERSPECTIVES

- 863 **A Hand to Support the Implantation Window**  
S. C. Hewitt and K. S. Korach  
    >> *Report p. 912*  
864 **A New Twist on Spintronics**  
G. L. J. A. Rikken  
    >> *Report p. 894*  
865 **Unlocking the Door to Invasion**  
A. Kereszt and E. Kondorosi  
    >> *Report p. 909*  
866 **Life on Low Flame in Hibernation**  
G. Heldmaier  
    >> *Report p. 906*  
868 **Controlling the Flow of Suspensions**  
H.-J. Butt  
    >> *Report p. 897*  
869 **Creating Stable Memories**  
J. D. Sweatt  
    >> *Report p. 924*  
870 **Hitting a Tiny Target in the Dark**  
R. S. Hawley  
    >> *Report p. 916*

## CONTENTS continued >>



page 841



pages 864 & 894



## COVER

False-colored atomic force micrograph of two types of molecules forming a mixed self-assembled monolayer on a gold surface. The two molecules differ in height by 0.2 nanometers, giving the appearance of ripples. This image was awarded first place in the photography category in the 2010 *Science*/NSF International Science & Engineering Visualization Challenge. The winning entries are featured in a special section starting on page 847 and at [www.sciencemag.org/special/vis2010/](http://www.sciencemag.org/special/vis2010/).

*Image: Seth B. Darling, Argonne National Laboratory; and Steven J. Sibener, University of Chicago*

## DEPARTMENTS

- 817 **This Week in Science**  
823 **Editors' Choice**  
826 **Science Staff**  
956 **New Products**  
957 **Science Careers**



## ESSAYS

- 872 **Genome-Sequencing Anniversary:  
A Celebration of the Genome, Part III  
A Living Constitution**  
*S. Jasanoff*  
**What Does a "Normal" Human Genome  
Look Like?**  
*M. V. Olson*  
**Of Mice and Humans**  
*S. Yamanaka*  
**Human Genome Sequencing:  
Celebrating 10 Years**  
*L. Al-Gazali*  
**Gene Patents: The Shadow of Uncertainty**  
*R. Cook-Deegan*  
**The Genomic Foundation Is Shifting**  
*J. S. Mattick*  
**Famine in the Presence of the  
Genomic Data Feast**  
*E. Hoal*  
>> *News story p. 838; Policy Forum p. 861*

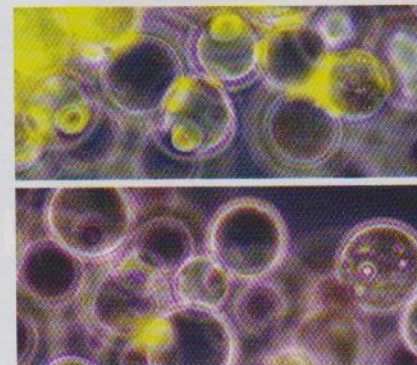
## BREVIA

- 876 **Synthetic Clonal Reproduction  
Through Seeds**  
*M. P. A. Marimuthu et al.*  
Clonal reproduction is engineered in a sexual plant by manipulating conserved genes controlling meiosis.

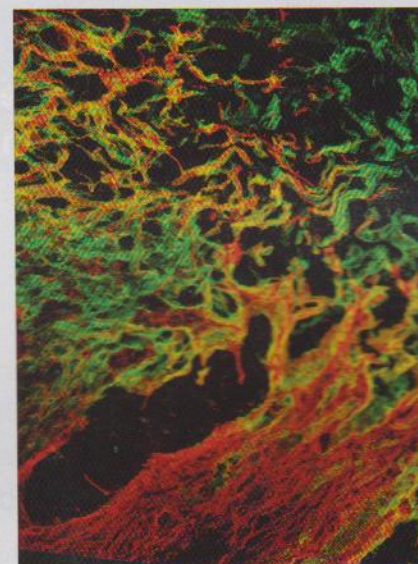
## RESEARCH ARTICLES

- 877 **Extended Nucleation of the  
1999  $M_w$  7.6 Izmit Earthquake**  
*M. Bouchon et al.*  
Low-frequency seismic events may have been part of slip accumulation before a large earthquake.  
>> *News & Analysis p. 836*
- 881 **The Crystal Structure of the Signal  
Recognition Particle in Complex  
with Its Receptor**  
*S. F. Ataide et al.*  
Guanine triphosphate controls changes in the signal recognition particle that facilitate transfer of the signal sequence to the translocon.
- REPORTS**
- 886 **Metallic and Insulating Oxide Interfaces  
Controlled by Electronic Correlations**  
*H. W. Jang et al.*  
The strength of electronic correlations dictates the transport properties of oxide interfaces.
- 889 **Time-Reversed Lasing and Interferometric  
Control of Absorption**  
*W. Wan et al.*  
Tuning the amplitude and phase of incident light can induce an enhancement of the optical absorption process.

- 892 **Quantum Reflection of  $\text{He}_2$  Several  
Nanometers Above a Grating Surface**  
*B. S. Zhao et al.*  
The helium molecule can interact at large distances with the evanescent repulsion potential of the surface.
- 894 **Spin Selectivity in Electron Transmission  
Through Self-Assembled Monolayers of  
Double-Stranded DNA**  
*B. Göhler et al.*  
Photoelectrons emitted from a DNA-covered gold surface can have an unbalanced spin population of up to 60%.  
>> *Perspective p. 864*
- 897 **Capillary Forces in Suspension Rheology**  
*E. Koos and N. Willenbacher*  
The addition of a small amount of a nonwetting immiscible fluid to a suspension can drastically alter its rheological properties.  
>> *Perspective p. 868*
- 900 **Steric Control of the Reaction of CH  
Stretch-Excited  $\text{CHD}_3$  with Chlorine Atom**  
*F. Wang et al.*  
Spectroscopy elucidates the complex interplay between orientational and vibrational effects in a simple chemical reaction.
- 903 **The Magnitude and Duration of Late  
Ordovician-Early Silurian Glaciation**  
*S. Finnegan et al.*  
Carbonate isotopes reveal a link between past ocean temperatures and mass extinction.
- 906 **Hibernation in Black Bears:  
Independence of Metabolic Suppression  
from Body Temperature**  
*Ø. Tøien et al.*  
Hibernating black bears suppress their metabolic rate to 25% of normal, but only slightly reduce their body temperature.  
>> *Perspective p. 866*
- 909 **LysM-Type Mycorrhizal Receptor  
Recruited for Rhizobium Symbiosis  
in Nonlegume *Parasponia***  
*R. Op den Camp et al.*  
*Parasponia* uses a mycorrhizal signaling receptor essential for arbuscle formation to control rhizobium nodule symbiosis.  
>> *Perspective p. 865*
- 912 **The Antiproliferative Action of  
Progesterone in Uterine Epithelium  
Is Mediated by Hand2**  
*Q. Li et al.*  
A progesterone-regulated transcription factor regulates stromal-epithelial communication in early pregnancy.  
>> *Perspective p. 863*
- 916 **Distinct Properties of the XY  
Pseudoautosomal Region Crucial  
for Male Meiosis**  
*L. Kauppi et al.*  
Recombination between the sex chromosomes during sperm formation is controlled by a splicing isoform of the SPO11 protein.  
>> *Perspective p. 870*
- 920 **Classic Selective Sweeps Were Rare  
in Recent Human Evolution**  
*R. D. Hernandez et al.*  
Much human genetic variation is likely due to purifying selection against deleterious mutations.
- 924 **Early Tagging of Cortical Networks  
Is Required for the Formation of  
Enduring Associative Memory**  
*E. Lesburguères et al.*  
Tagging of cortical networks at the time of encoding is crucial for long-lasting associative memories.  
>> *Perspective p. 869*
- 928 **Microtubule Stabilization Reduces  
Scarring and Causes Axon Regeneration  
After Spinal Cord Injury**  
*F. Hellal et al.*  
Taxol stimulates the capacity of axons to grow after spinal cord injury.



pages 868 &amp; 897



page 928

CONTENTS continued &gt;&gt;